

## LOW RATES IN BOTH CASES

	<i>Maternal Mortality</i>	<i>Infant Mortality</i>
Southport ... ..	2·60	64·28
Barrow-in-Furness ...	3·58	72·42

It thus appears that the careful investigation of the actual causes of the high maternal death-rates in certain districts which is now being undertaken by the Ministry of Health is likely to be more effective in producing a reduction of these rates than the astonishing remedy which Mr. Pitt-Rivers seems to suggest—namely, the reversion to obsolete methods of infant care, with a view to the reintroduction of the high infant death-rates of former years, which his statistical inquiries have apparently led him to consider desirable.

Apart from any humanitarian considerations, there seem to be fundamental errors both in the calculations made in the article and in the conclusions which are derived from them. Supposing that the biological function of a woman is not to produce children who will die, but essentially to produce children who will survive sufficiently long to reach maturity and so reproduce in their turn, it is necessary, in order to obtain a true picture of the vital cost of child-bearing in any community, to add to the official maternal death-rates per thousand births the mortality incurred in bearing those children who do not survive. This adjustment materially affects the supposedly good maternal death-rates of such countries as Chile, quoted by Mr. Pitt-Rivers as having the lowest white maternal and the highest white infant death-rate in the world, and would in this case increase them by over 30 per cent.

Even if the unwarrantable assertion that maternal and infant death-rates are correlated could be upheld, there are not, I imagine, many people who would agree that it is better to sacrifice 241\* children's lives than that of one or at most two mothers; nor that such sacrifice leads in itself to any improvement in the mental and physical standards of a race.

Nothing but sheer perversity seems capable of supporting an argument to the effect that the constitutional quality and innate capacities of the mothers of England and Wales are below the standards of those of the women of Chile, or, to carry the point to its logical conclusion, to those of the lower-class Chinese, or the Bagoda people, among whom the infant death-rates are said to amount to over 50 per cent.†

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\* This figure is derived by subtracting the English infant death-rate of 74 quoted in the article from that given for Chile in 1906-10, i.e. 315. The present English infant death-rate is only 64.

† Pell, C. E., *The Law of Births and Deaths*, pages 114-5.

*To the Editor, Eugenics Review*

SIR,—Mr. Pitt-Rivers in his article under the above heading omits reference to the stock-breeder, although I admit that he mentions the biologist in his list of scientists who should be consulted. Like our late benefactor, Mr. Twitcheen, I have been led towards eugenics partly through farming sheep under conditions more nearly approaching to primitive than those obtaining in the more fertile and agricultural parts of England. If such a sheep farmer were told that in future he would have to arrange that no ewe should produce her first lamb until very much later in life than hitherto, he would, I think, reply that a much increased maternal mortality must ensue. If in addition he were told that in future his breeding ewes, both before and after sexual intercourse, must be stall-fed instead of being forced as hitherto to work regularly and physically and out of doors in hunting for a living, he would, I think, reply that this must still further increase the maternal mortality rate. And if it were pointed out to him that stall-feeding would simplify the regular attendance of a "vet," he would, I am afraid, say "Thank you for nothing"—if not worse!

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*To the Editor, Eugenics Review*

SIR,—In view of the very interesting article by Captain George Pitt-Rivers in the current issue of the *EUGENICS REVIEW* (January, 1935, page 273) and of the widespread notice which is being taken in the problem of maternal mortality, and the extremely various causes which have been assigned for the fact that it has not decreased in spite of all the efforts of local authorities and maternity welfare centres, would it not be a good plan to hold a conference (either public or private) at which the matter could be considered in *all* its aspects?

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**Sterility and Eugenics***To the Editor, Eugenics Review*

SIR,—I must object to Mr. Kenneth Walker's statement (January, 1935, page 294) that *Human Sterility* by S. R. Meaker has little direct bearing on eugenics. In strict logic and statistics it is true that sterility is probably less in the upper classes than in the lower, when age of marriage is taken into account. That is, a longshoreman or charwoman married first at 30, after years of hard work and slum surroundings, is more likely to have become debilitated or venereally diseased than a curate or a school teacher of like age.

But as long as the lower classes habitually marry

young and the upper classes do the opposite, any victories of medicine over sterility will, as a practical matter, benefit the upper classes' birth-rates far more than the lower classes'. For this view to be incorrect sterility would have to differ from most other chronic debilities and infections, which commonly grow more devastating as maturity is reached and passed.

I feel the reviewer fell into a type of practical error which is all too common among us. Too many eugenicists are interested in the subject merely in a cool detached way. We should survey the immediate scene—our sisters, our cousins, and our aunts—with a crusading spirit. Scarcely one of us but possesses married kinsfolk who are sterile. Of my college classmates who are married, 21 per cent. are childless, most of them I believe involuntarily. To people like these sterility is no subject for statistical quibbling. They have made their beds usually too tardily, but some of them might lie in them more fruitfully if they would early consult a specialist on sterility. There is grave reason to do so, it is said, if conception does not occur within a few months after normal relations are established. In truth, however, the specialist should be consulted before marriage at least by the man—probably years before marriage. Science can now predict a great deal about male fertility from microscopic examination. We are told that marital intercourse varies in frequency from once a day to once a year, and it is probable that fertility follows an equally wide variation. Obviously a person naturally of very low fertility will be wise to marry young, to avoid contraception and to consult those who are at present making progress in combating sterility.

Sterility has too long been regarded as mostly a visitation from Heaven. Discussion of it as an exceedingly prevalent disease that can be studied and combated will of course interest people in fighting it, and early marriage and fertility will benefit in general esteem. As educational propaganda, nothing serves eugenics much better than talk about sterility.

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## Genetics of Intellect

*To the Editor, Eugenics Review*

SIR,—Dr. Vernon's letter (October, 1934, page 241) is certainly helpful in preparing the way for a fruitful co-operation between psychology and genetics.

With regard to the statistical confusion on the question of the distribution of the grades of intellect—I still think that the normal frequency distribution is only to be found in those populations which are genetically nn, since any introduction of the dominant N gene in a population (as in my L.F. data) is bound to disturb the normal frequency by giving an excess of the mediocre grade. I am in entire agreement with Dr. Vernon's final point concerning "innate ability." His definition of "innate ability" as "heredity-plus-an-average-environment" would, I imagine, be acceptable to most geneticists and psychologists, save perhaps the extreme behaviourists who mysteriously attribute everything to the environment.

As a matter of fact the so-called problem of "heredity *versus* environment" has no real existence. It is merely a confusion of thought. It is obvious that heredity cannot act *in vacuo* and when a geneticist speaks of "innate ability" he simply means the reaction of a gene complex to an ordinary environment. In discussing heredity in terms of genes an ordinary or "average" environment is always tacitly understood, and it is only in those rare cases where the environment is extraordinary or "unusual" that it is necessary to mention it and to take it into account. The amusing hypothetical cases given by Dr. Vernon of an infant living on a silent desert island and of *amœbæ* brought up in the refined and cultured atmosphere of a super-intelligent family are so extremely "unusual" that for all practical purposes they may be regarded as impossible and therefore negligible.

The main point is that "innate ability" is a capacity of the gene-complex and not of the environment. I hope that the present correspondence has served to clear the ground for a further advance by geneticists and psychologists towards a solution of the complex problem of the genetics of intellect.

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